Examiner

Initials'

QE JC87

Substitute for form 1449A/PTO

#### INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet	1	of	سج	5

U.S. Patent Document

Number

Kind Code

Co	mplete if Known	3
Application Number	09/509,734	Z
Filing Date	06/14/2000	豆
First Named Inventor	Itescu, S.	
Group Art Unit	1644	6
Examiner Name	David A. Saunders	
Attorney Docket Number	A31856-PCT-USA	600/296

Date of Publication of

Cited Document

MM-DD-YYYY

-					/		
				H			·
				II			
			_	+	$\overline{}$		
					X		
					$/\setminus$		
		1			<del>/                                    </del>		1
					FOE	EIGN PATENT DOCUMENTS	1 .
		Τ	Foreign Pa	tent Dac			Date of Publication of
aminer tials*	Cite No. <sup>1</sup>	Office <sup>3</sup>	Numb	$-\tau$	Kind Code <sup>t</sup> (if known)	Name of Patentee or Applicant of Cited Document	Cited Document  MM-DD-YYYY T6
				+-			
				+-		<del>                                     </del>	
			$-\!\!-\!\!\!-\!\!\!\!-$				
		╂┷═╂	<del></del>			<b>———</b>	
		<del>                                     </del>				· · · · · · · · · · · · · · · · · · ·	
					+	<u> </u>	
	ner I		<del>-,/-</del>	_		Date	·
xami			; <i>[</i>			Considered	

<sup>1</sup> Unique citation designation number. <sup>2</sup> See attached Kinds of U.S. Patent Documents. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if

possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

U.S. PATENT DOCUMENTS

of Cited Document

Name of Patentee or Applicant

Sheet

Please type a plus sign (+) inside this box -> +

ostitute for form 1449B/PTO

#### FORMATION DISCLOSURE TATEMENT BY APPLICANT

(use as many sheets as necessary)

Co	Complete if Known		
Application Number	09/509,734		
Filing Date	06/14/2000	7	
First Named Inventor	Itescu, S.		
Group Art Unit	1644	2	
Examiner Name	David A. Saunders		
Attorney Docket Number	A31856-PCT-USA		

		OTHER PRIOR ART NON PATENT LITERATURE DOCUMENTS	
Examiner Initials	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T²
1 1200		Hosenpud J.F., Novick R.J., Bennett L.E., Keck B.M., Fiol B., Daily P.O. The Registry of the International Society of Heart and Lung Transplantation 1996; 15:655.	
	2	Kormos, R., Arimtage, J., Wolyn, T. et al. Graft atherosclerosis: effects of cellular rejection and human lymphocyte antigen. The Journal of Heart and Lung Transplantation 1992; 11(3): S104-110.	
/	3	Kerman, R.H., Kimball, P., Scheinen, S. et al. The relationship among donor-recipient HLA mismatches, rejection, and death from coronary artery disease in cardiac transplant recipients. Transplantation 1994; 57(6); 884-8.	
	4	Smith, J.D., Rose, M.L., Pomerance, A., Burke, M., Yacoub, M.H. Reduction of cellular rejection and increase in longer-term survival after heart transplantation after HLA-DR matching. Lancet 1995; 346:1318-22.	
	5	Costanzo-Nordin, M.R. Cardiac allograft vasculopathy: relationship with acute cellular rejection and histocompatibility. The Journal of Heart and Lung Transplantation 1992; 11:S90-103.	
V	6	Suciu-Foca N., Reed E., Marboe C., Xi Y.P., Kai S.Y., Ho E., Rose E.A., Reemstma K., King, D.W. Role of anti-HLA antibodies in heart transplantation. Transplantation 1991; 51:716-724.	
	7	Hess M., Hastillo A., Mohanakamar T., Crowley J.J., Vetrovac G., Szentpetery, S., Wolfgang, T.C., Lower R.R Accelerated atherosclerosis in cardiac transplantation: role of cytoxic B-cell antibodies and hyperlipidemia. Circulation 1983; 68:94-101.	
	\8	Rose, E.A., Pepino P., Barr M., Smith C., Ratner A., Ho E., Berger C. Relation of HLA antibodies and graft atherosclerosis in human cardiac allograft recipients. The Journal of Heart and Lung Transplantation 1992; S120-123.	
	9	DeMattos, A.M. Head M.A., Everett, J., et al. HLA-DR mismatching correlates with early cardiac allograft rejection, incidence, and graft survival when high-confidence-level serological DR typing is used. Transplantation 1994; 57(4);626-630.	
	10	Kriklin, J.K., Bourge, R.C., BBarr, M.L., et al. Influence of HLA mismatch on rejection after heart transplantation: a multiinstitutional study. The cardiac transplant research database group. The Journal of Heart and Lung Transplantation. 1995; 13(4); 583-95.	
	11	Keogh, A., Kaan, A., Doran, T., et al. HLA mismatching and outcome in heart, heart-lung and single lung transplantation. The Journal of Heart and Lung Transplantation. 1995; 14(3);444-51.	

Examiner	Ox -1	( )	Date	9/1/10
Signature	∞ curd	a Saunders	Considered	81 81 03

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>&</sup>lt;sup>1</sup> Unique citation designation number. <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.



Please type a plus sign (+) inside this box -> +

OF 100

Substitute for form 1449B/PTO

## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet 3 of 75

Complete if Known				
Application Number	09/509,734			
Filing Date	06/14/2000			
First Named Inventor	Itescu, S.			
Group Art Unit	1644			
Examiner Name	David A. Saunders			
Attorney Docket Number	A31856-PCT-USA			

		OTHER PRIOR ART NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T²
	12	Rizeq, M., Masek, M.A., and Billingham, M.E. Acute rejection: significance of elapsed time after transplantation. The Journal of Heart and Lung Transplantation. 1994; 13(5); 862-868	
	13	Winters, G.L., Loh, E., Schoen, F.J., Natural history of focal moderate cardiac allograft rejection: is treatment warranted. Circulation. 1995; 91:1975-1980.	
L.	14	White J.A., Guirandon C., Pfluglelder P.W., Kostuk W.J. Routine surveillance myocardial biopsies are unnecessary beyond one year after heart transplantation. The Journal of Heart and Lung Transplantation 1995; 14:1052.	
	15	Smith, J.D., Danskine, A.J., Laylor, R.M., Rose, M.L., and Yacoub, M.H. The effect of panel reactive antibodies and the donor specific corssmatch on graft survival after heart and heart-lung transplantation. Transplant Immunology 1993; 1:60-65.	
1	16	Rose, E.A., Smith, C.R., Petrossian, G.A., Barr, M.L., Reemtsma, K. Humoral immune responses after cardiac transplantation: correlation with fatal rejection and graft atherosclerosis. Surgery 1989; 106:203-208.	
	17	Kemkes, B.M., Schultz, A., Engelhardt, M., Brandl, U., and Breuer, M. Noninvasive methods of rejection diagnosis after heart transplantation. The Journal of Heart and Lung Transplantation 1992; 11:S221-S231.	
, <i>'</i>	18	Hall T., Baumgartner W., Borkin A., et al. Diagnosis of acute cardiac rejection with antimyosin antibody monoclonal antibody, phosphorus nuclear magnetic imaging, two dimensional echocardiography and endocardial biopsy. The Journal of Heart Transplantation 1986; 6:419-24.	
	19	Wisenberg G., Pflugfelder J.V., Kostuk, W.J., McKenzie F.N., Prato F.S. Diagnostic applicability of magnetic resonance imaging in assessing human cardiac allograft rejection. American Journal of Cardiology 1987; 53:130.	
	20	George, J.F., Kirklin, J.K., Shroyer, T.W., et al. Utility of a posttransplantation panel-reactive antibody measurements for the prediction of rejection frequency and survival or heart transplant recipients. The Journal of Heart and Lung Transplantation 1995; 14:856-864.	
	21	Smith, J.D., Danskine, A.J., Rose, M.L., and Yacoub, M.H. Specificity of lymphocytotoxic antibodies formed after cardiac transplantation and correlation with rejection episodes. Transplantation 1992; 53:1358-62	
<u>-</u>			
	22	Zavazava, N., Botcher, H., and Ruchholtz, W.M., Soluble MHC Class I antigens (sHLA) and anti-HLA antibodies in heart and kidney allograft recipients. Tissue Antigens 1993; 42:20-26.	

Examiner Signature	Dain	Û	of aunders	Date Considered	8/6/03

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>&</sup>lt;sup>1</sup> Unique citation designation number. <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.



Please type a plus sign (+) inside this box -> +

Substitute for form 1449B/PTO

## FORMATION DISCLOSURE ATEMENT BY APPLICANT

(use as many sheets as necessary)

Co	mplete if Known	:
Application Number	09/509,734	
Filing Date	06/14/2002	
First Named Inventor	Itesca, S.	
Group Art Unit	1644	
Examiner Name	David A. Saunders	
Attorney Docket Number	A31856-PCT-USA	

Examiner Cite No.1

23 Fin

			2
		OTHER PRIOR ART NON PATENT LITERATURE DOCUMENTS	9
Examiner Initials	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
Sul	23	Fischer, P.E., Suciu-Foca, N., Ho, E., Tugulea, S., Rose E.A., Michler, R.E., Mancini, D. Additive value of immunologic monitoring to histologic grading of heart allograft biopsy speciments: implications for therapy. Journal of Heart and Lung Transplantation 1995; 14:1156-1161.	
	24	Liu, Z., Sun, Y.K., Xi, Y.P., Maffei, A., Harris, P.E., Suciu-Foca, N. Contribution of direct and indirect recognition pathway to T cell alloreactivity. Journal of Experimental Medicine 1993; 177:1643-1650.	
١	25	Liu, Z., Colovai, A.I., Tugulea, S., Reed, E.F., Fisher, P.E., Mancini, D., Rose, E.A., Cortesini, R., Michler, R.E., Suciu-Foca, N., Indirect Recognition of donor HLA-DR peptides in organ allograft rejection. Journal of Clinical Investigation 1996; 98:1150-1157.	
Ĺ	26	Tugulea, S., Ciubotariu, R., Colovai, A.I., Liu, Z., Itescu, S., Schulman, L., Fisher, P.E., Hardy, M.A., Rose, E:A., Michler, R.E., Cortesini, R., Suciu-Foca, N. New strategies for early diagnosis of heart allograft rejection. Transplantation 1997; 64:842-847.	
-	27	Ciubotariu, R., Colovai, A.I., Ho, E., Itescu, S., Ravalli, S., Hardy, M.A., Cortesini, R., Rose, E.A., Suciu-Foca, N. Persistent allopeptide reactivity and epitope spreading in chronic rejection of organ allografts. Journal of Clinical Investigation 1998; 101:398-405.	
	28	Markus, P.M., Salvaggi, G., Cai, X., Fung, J.J., Starzl, T.E. Induction of donor-specific transplantation tolerance ot skin and cardiac allografts using miched chimerism in (A+B ->A) in rats. Cell Transplantation 1993; 2:345-353.	
ţ	29	Zeevi, A., Pavlick, M., Lombardozzi, S., Banas, R., Pappo, O., Rao, A.S., Fontes, P., Demetris, J., Shapiro, R., Dodson, E., et al. Immune status of recipients following bone marrow-augmented solid organ transplantation. Transplantation 1995; 59:616:620.	
1	30 ֻ	Creemers, P. Du Toit, E., Cassidy, M.J., Kahn, D. Sequential mixed lymphocyte culture after kidney fransplantation: induction of tolerance or sensitization. Nephron 1997; 75:166-170.	
	31	Billingham, M.E. Dilemma of variety of histopathologic grading systems for acute cardiac allograft rejection by endomyocardial biopsy. Journal of Heart Transplantation 1990; 9:272-276.	
	32	Kaplan, E.L., and Meier, P. Nonparametric estimation from incomplete observations. Journal of the American Statistic Association 1958; 53: 457-481.	
	33	Liang, K.Y., and Zenger, S.L. Longitudinal data analysis using generalized linear models. Biometrica 1986; 73:13-22.	

Examiner Signature	David	a Saunders	Date Considered	8)5)	03

<sup>&</sup>lt;sup>1</sup> Unique citation designation number. <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.



<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Please type a plus sign (+) inside this box -> +

PE JC Subs

Sheet

Substitute for form 1449B/PTO

# NFORMATION DISCLOSURE TATEMENT BY APPLICANT

(use as many sheets as necessary)

<del></del>	····		
Complete if Known			
Application Number	09/509,734	-	
Filing Date	06/14/2002		
First Named Inventor	Itesca, S.		
Group Art Unit	1644		
Examiner Name	David A. Saunders		
Attorney Docket Number	A31856-PCT-USA		
	· · · · · · · · · · · · · · · · · · ·		

		OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T2
OUS	34	Krieger, N.R., Yin, D.P., and Fathman, C.G. CD4+ but not CD8+ cells are essential for allorejection. Journal of Experimental Medicine 1996; `84:2013-2018.	
	35	Starzl, T.E., Demetris, A.J., Rao, A.S., Thompson, A.M., Trucco, M., Murase, N. Migratory nonparenchymal cells after organ allotransplantation: with particular reference to chimerism and the liver. Progress in Liver Diseases 1994; 12:191-213.	
	36	Schlitt, H.J., Hundrieser, J., Hisanaga, M., Uthoff, K., Karck, M., Wahlers, T., Wonigeit, K., Pichlmayr, R. Patterns of donor type microchimerism after heart transplantation. Lancet 1994; 343:1469-1471.	
/	37	Hisanaga, M., Hundrieser, J., Boker, K., Uthoff, K., Raddaatz, G., Wahlers, T., Wonigeit, K., Pichlmayr, R., Schlitt, H.J. Development, stability, and clinical correlations of allogeneic microchimerism after solid organ transplantation. Transplantation 1996: 61:40-45	
1/	38	Vanderlugt, C.J. and Miller, S.D., Epitope spreading. Current Opinion in Immunology 1996; 8:831-836.	
	39	Mamula, M.J. and Janeway, C.A. Jr. Do B cells drive the diversification of immune responses? Immunology Today 1993; 14:151-154.	
V	40	Reed, E.F., Hong, B., Ho, E., Harris, P.E., Weinberger, J., ,Suciu-Foca, N. Monitoring of soluble HLA alloantigens and anti-HLA antibodies identifies heart allograft recipients at risk of transplant associated coronary artery disease. Transplantation 1996; (61)566-72.	
	41	Itescu, S., Weinberg, A., Burke, E.M., Tung, T., Oz, M., Reed, E., Suciu-Foca, N., Rose, E.A., Michler, P.E. Influence of pre-formed IgG anti-HLA antibodies on development of cellular rejection in highly sensitized cardiac allograft recipients. The Journal of Heart and Lung Transplantation 1997: 16(1): 78.	
1	42	Lavee, J., Kormos, R.L., Duquesnoy, R.J., Zerbe, T.R., Armitage, J.M., Vaneck, B.S., Hardesty, R.L., and Griffith, B.P. Influence of panel-reactive antibody and lymphocytotoxic crossmatch on survival after heart transplantation. Journal of Heart and Lung Transplantation 1991; 6:921-930.	
	43	Loh, E., Bergin, J.D., Couper, G.S., Mudge, G.H. Role of panel-reactive antibody cross-reactivity in predicting survival after orthotopic heart transplantation. Journal of Heart and Lung Transplantation 1994; 13:194-201.	
	44	Valentine, H.A., Yeoh, T.K., Gibbons, R., McCarthy, P., Stinson, E.B., Billingham. M.E., Popp, R.L. Sensitivity and specificity of diastolic indexes for rejection surveillance: temporal correlation with endomyocardial biopsy. Journal of Heart and Lung Transplantation 1991; 10:757-765.	
• 			

Examiner Signature	David a Saunders	Date Considered	8/6/03	

<sup>&</sup>lt;sup>1</sup> Unique citation designation number. <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.



<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

KER BOTTS LLP

ease type a plus sign (+) inside this box

RECEIVED DEC 2 0 2002 TECH CENTER 1600/2900

TRANSMITTAL	Filing Date	
FORM	First Named	

(to be used for all correspondence after initial filing)

**Application Number** 09/509,734 06/14/2000 Itescu, S. d Inventor David A. Saunders Group Art Unit 1644 **Examiner Name** 

Total Number	r of Pages in This Subm	nission 7	Attorney Docket Number	er A31856-PCT-USA
ENCLOSURES (check all that apply)				
Fee Transmittal Fo	orm		ment Papers Application)	After Allowance Communication to Group
Fee Attache	ed	Drawin	g(s)	Appeal Communication to Board of Appeals and Interferences
Amendment / Reply		Licensing-related Papers	Appeal Communication to Group (Appeal Notice, Brief, Reply Brief)	
After Final		Petition Petition to Convert to a	Proprietary Information	
Affidavits/d	declaration(s)	Provisi	onal Application	Status Letter
Extension of Time	Request	Chang Addres	of Attorney, Revocation e of Correspondence s	Other Enclosure(s) (please identify below)
Express Abandonment Request  Information Disclosure Statement  Certified Copy of Priority Document(s)  Response to Missing Parts/ Incomplete Application		Terminal Disclaimer  Request for Refund  CD, Number of CD(s)		documents listed infra.
		Remarks		
Response to	o Missing Parts FR 1.52 or 1.53			
SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT				
Firm or Individual name	BakerBotts LLP 30 Rockefeller Pla New York, NY 10	aza		
Signature			Att Name: PTO Reg:	Carmella L. Stephens 41,328
Date	December 10, 2002			
CERTIFICATE OF MAILING				
I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class				

mail in an envelope addressed to: Commissioner for Patents, Washington, DC 20231 on this date: December 10, 2002

<u> </u>		December 10, 2002
Typed or printed name	Carmella L. Stephens	
Signature	Carmella d. Studies	Date December 10, 2002